

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

September 11, 2007

Ms. Shirley J. Olinger, Acting Manager Office of River Protection United States Department of Energy P.O. Box 450, MSIN: H6-60 Richland, Washington 99352 Mr. William S. Elkins, Project Director Bechtel National, Inc. 2435 Stevens Center Place, MSIN: H4-02 Richland, Washington 99354

Re: Submittal of Hanford Facility RCRA Permit Modification Notification Form 24590-LAW-PCN-ENV-06-012; Class ¹1 Modification to the Hanford Facility Dangerous Waste and Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10 (Waste Treatment and Immobilization Plant), WA7890008967

Dear Ms. Olinger and Mr. Elkins:

The Department of Ecology approves the referenced Class ¹1 Modification submitted August 23, 2007. The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

Modification 24590-LAW-PCN-ENV-06-012 provides the updated Independent Qualified Registered Professional Engineer Report (CCN: 139507, AREVA-IA-100, Revision 0). This report provides the structural integrity assessment for the Low Activity Waste Melter Feed Process (LFP) System vessels:

- Melter Feed Prep Vessels (LFP-VSL-00001/3).
- Melter Feed Vessels (LFP-VSL-00002/4).

If there are any questions, contact me at 509-372-7882 or Tracy Gao at 509-372-7901.

Sincerely,

Brenda Becker-Khaleel WTP Permit Writer Nuclear Waste Program

aah/jc Enclosure EDMC

cc: See next page

Ms. Olinger and Mr. Elkins September 11, 2007 Page 2

cc electronic w/enc:

John Eschenberg, USDOE
Lori Huffman, USDOE
Tony McKarns, USDOE
Gae Neath, USDOE
Don Sommer, USDOE
William Taylor, USDOE
Brad Erlandson, BNI
Peggy Fisher, BNI
Stan Hill, BNI
Dennis Klein, BNI
Sandi Murdock, BNI
Phil Peistrup, WGI

cc w/enc:

Administrative Record: Tank Waste Treatment Requirements
Environmental Portal
USDOE-ORP Correspondence Control

Hanford Facility RCRA Permit Modification Notification Form Part III, Operating Unit 10

Waste Treatment and Immobilization Plant

Index

Page 2 of 3:

Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant

Update the integrity assessment for the LAW Vitrification Building, LFP Melter Feed Prep Vessels (LFP-VSL-00001/3), LFP Melter Feed Vessels (LFP-VSL-00002/4), and their appurtenances, located in cells L-0123/L-0124 respectively, at Elevation 2'-0" of the LAW Vitrification Building in Appendix 9.11 of the Dangerous

Waste Permit.

Submitted by Co-Operator:

D. A. Klein

Reviewed by ORP Program Office:

S. J. Øljriger

24590-LAW-PCN-ENV-06-012

Quarter Ending September 30, 2007

Hanford Facility RCRA Permit Modification Notification Form				
Unit:	Permit Part & Chapter:			
Waste Treatment and Immobilization Plant	Part III, Operating Unit 10			

Description of Modification:

The purpose of this modification is to update the Integrity Assessment of the Low Activity Waste (LAW) Melter Feed Process System (LFP) Elevation 2'-0" (24590-101-SC-HXYG-0074-03-00002, REV. 00A) currently located in Appendix 9.11 of the Dangerous Waste Permit (DWP).

Appendix 9.11						
Replace:	24590-CM-HC4-HXYG-0074-03- 00002, Rev 00A	With:	CCN: 139507, AREVA-IA-100, Rev.0; Low-Activity Waste (LAW) Melter Feed Process (LFP) System; Melter Feed Prep Vessels (LFP-VSL-00001/3) and Melter Feed Vessels (LFP-VSL-00002/4)			

This modification requests Ecology approval and incorporation into the permit the above mentioned integrity assessment report. The report has been updated by the Independent Qualified Registered Professional Engineer (IQRPE). The report reflects the IQRPE's review of the following final design documents:

- Mechanical Data Sheets, Facility, Vendor Fabrication Drawings, Specifications, Drawings, and Mechanical Data Sheets produced in accordance with References:
 - ASME Boiler and Pressure Vessel Code (BPV), Section VIII, Division 1, Rules for Construction of Pressure Vessels, American Society of Mechanical Engineers
 - UBC 1997, Uniform Building Code, International Conference of Building Officials
 - AISC Manual of Steel Construction, Allowable Stress Design, American Institute of Steel Construction
- 24590-CM-POA-MVA0-00002-02-03, Rev. 00F, Design Calculations for LFP-VSL-00001 and LFP-VSL-00003
- 24590-CM-POA-MVA0-00002-02-01, Rev. 00E, Design Calculations for LFP-VSL-00002 and LFP-VSL-00004.

For each item of "Information Assessed" in the integrity assessment report, the items listed under the "Source of Information" column were reviewed and found to furnish adequate design controls and requirements to ensure the design fully satisfies the requirements of Washington Administrative Code, WAC-173-303-640, "Tank Systems," *Dangerous Waste Regulations*.

WAC 173-303-830 Modification Class: 12	Class 1	Class 11	Class 2	Class 3
Please mark the Modification Class:		X		

¹ Class 1 modifications requiring prior Agency approval.

Ref: 24590-WTP-GPP-SENV-010

² If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class '1, if applicable.

Quarter Ending September 30, 2007

24590-LAW-PCN-ENV-06-012

Enter Relevant WAC 173-303-830, Appendix I Modification citation number:	N/A		
Enter wording of WAC 173-303-830, Appendix I Modification citation: In accordance with WAC 173-303-830(4)(d)(i), this modification notification is a Class ¹ 1 modification. WAC 173-303-830(4)(d)(ii)(A) states, "Class 1 modification permit current with routine changes to facility or its operation. These changes or reduce the capacity of the facility to protect human health or the environment director may require prior approval."	tions apply to minor changes do not substantially alter the	that keep the permit conditions	
Modification Approved: Yes No (state reason for denial)	Reviewed by Ecology:		
Reason for denial:	blauhllull B. Becker-Khaleel	9/11/07- Date	